

Date: Wednesday, 09/04/2008 9:18:29 AM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: PANEL-350 UPPER BULKHEAD		
Job Number	: 38504 <i>N</i>					
Estimate Number	: 13100					
P.O. Number	:			Part Number	: D36553	
This Issue	: 09/04/2008		S.O. No. :	Drawing Number	: D3655 REV A	
Prsht Rev.	: NC			Project Number	: 00204	
First Issue	: / /		Type :	Drawing Revision	: A	
Previous Run	: 37664			Material	:	
Written By	:			Due Date	: 30/04/2008	
Checked & Approved By	: <i>JO 08-4.09</i>			Qty:	2 Um: Each	
Comment	: Est. Rev. A 07/12/13 DL verified by:DD					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	MLEXS093F600607	GE PLASTICS LEXAN SHEET
		→ PTO.
	Comment: Qty.: 23.0000 sf(s)/Unit Total : 46.0000 sf(s) GE PLASTICS LEXAN SHEET batch: <i>107574</i>	<i>BB 08/04/09 X2.</i>
2.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
	Comment: HAND FINISHING THERMOFORMING	<i>BB 08/04/09 X2</i>
3.0	THERMOFORMING	THERMOFORMING MACHINE
	Comment: THERMOFORMING MACHINE	
	Thermoform as per Dwg. D3655-3and Folio FTA 017 using tool DT 8985	
	Dwg. Rev. <i>A</i>	
	Folio Rev. <i>A</i>	
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	
	Visually inspect for proper formation of each part	
		<i>BB 08/04/09 X2</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08.04.10	1	Change, material usage to 34.66 sq ft to remove leftover. unusable material from stock. (correct estimate) #13100	DP	08.04.10		168.09.17	0804.24

Part No: D3655-3 PAR #: N/A Fault Category: Prod/Manufacturing NCR: Yes No DQA: D Date: 08/08/17
 Used in D350-766-011 Eng/Design QA: N/C Closed: D Date: 08/08/17

NCR: 38504		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.04.11	3	Dim 45.5" is 44.5" Dim 19.9 is 20.9"	CP 08.04.11 pw 081642	DWG DID NOT MATCH MOLD DIMS. PARTS ACCEPTABLE. REF. DS EMAIL	NP	0804.24	CP 08.04.11 pw 081642	0804.24

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: PANEL-350 UPPER BULKHEAD

Job Number: 38504

Part Number: D36553

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 QC8 SECOND CHECK



08/04/11 Dh
x2

Comment: SECOND CHECK

6.0 HAND FINISH TH HAND FINISHING THERMOFORMING



08/04/11 Dh

Comment: HAND FINISHING THERMOFORMING

x2

1) Trim to Finished Dimensions as per dwg D3655

7.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



08/04/11 Dh

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

x2

Check dimensions to ensure conformity to drawing tolerances.

8.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/04/11 Ts (x2)

9.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock
Location: _____

Pack 1/2

10.0 QC21 FINAL INSPECTION/W/O RELEASE



08/09/11 H

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



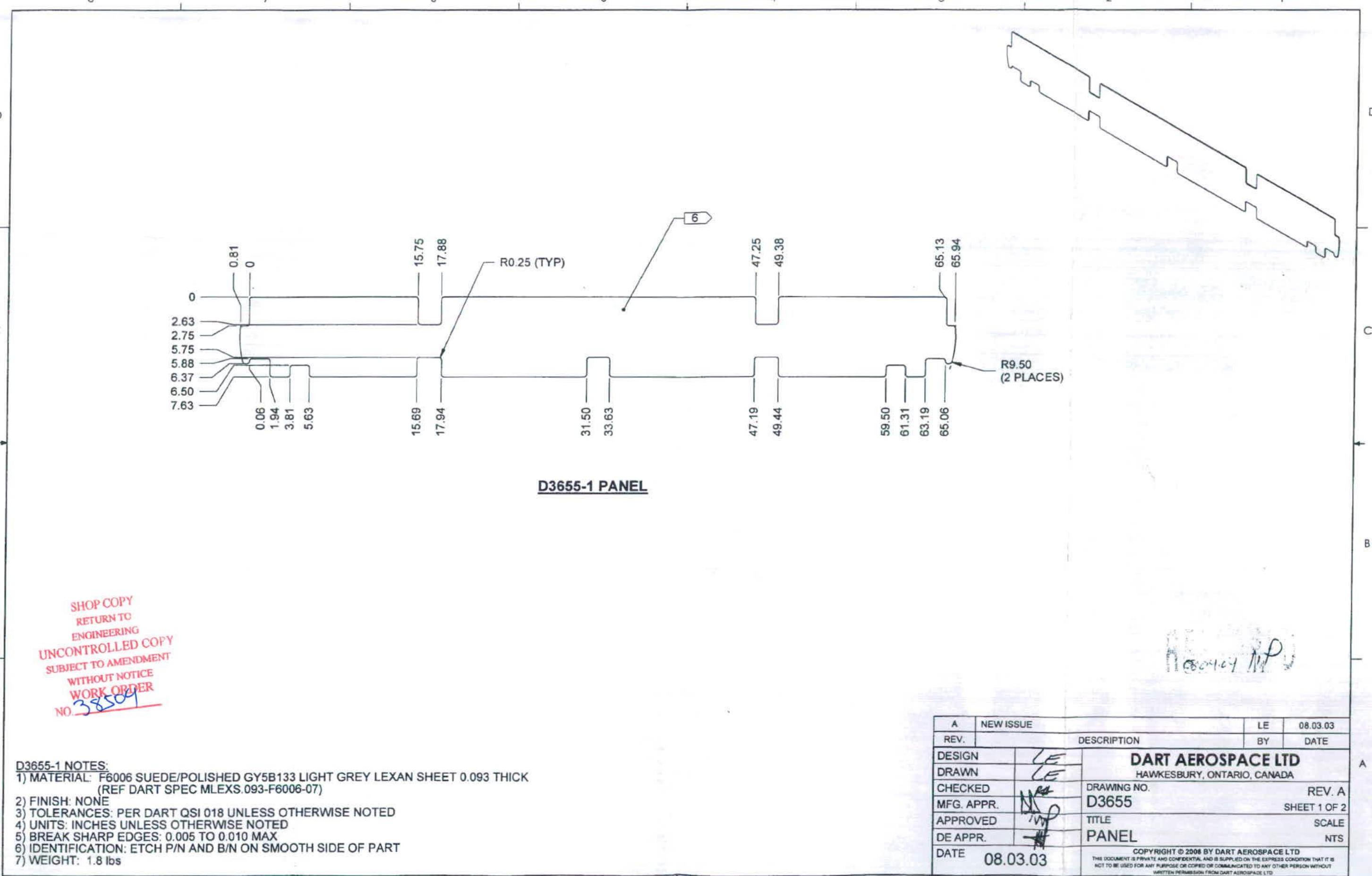
mf 08-09-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DART AEROSPACE LTD	WORK ORDER:	38504
Description: Panel 3570 UPPER Bulkhead	Part Number:	D36553
Inspection Dwg: D3655 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

**(Step 4) Thermoforming
Visual Inspection Sign-off**

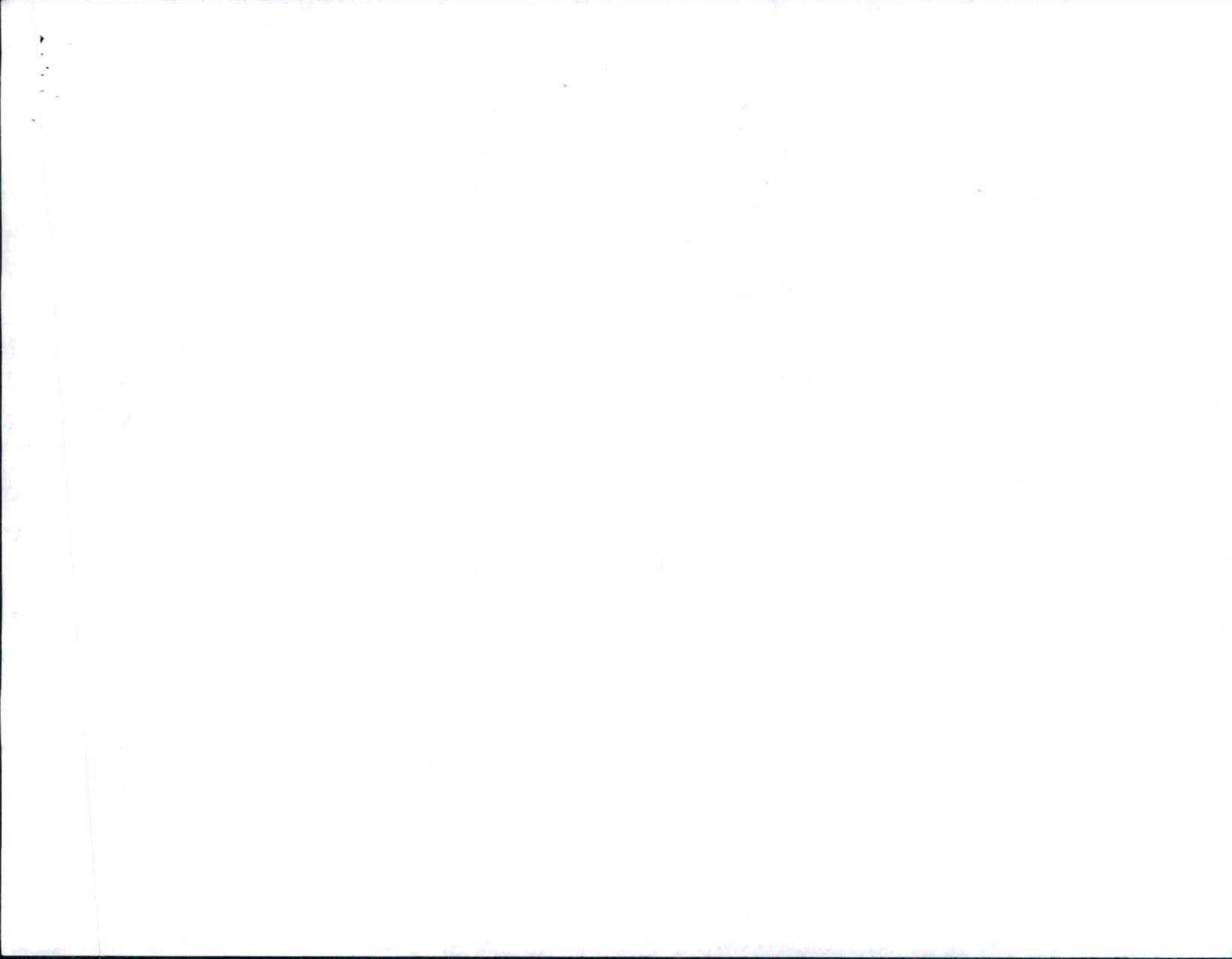
Description	Initials
Tight, even radius throughout part	PL-
Acceptable shape definition	PL-
Acceptable texture retention	PL-
Free of visual flaws (bumps, cracks, voids, etc.)	PL-

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing D36X3 Rev. A and record below

Measured by:	<u>Dh</u>	Audited by:	<u>/</u>	Prototype Approval:	<u>MP</u>
Date:	08.04.10	Date:	08.04.24	Date:	08.04.10

Rev	Date	Change	Revised by	Approved
		New Issue		



Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: April 11, 2008 3:31 PM
To: 'Chris Provencal'
Cc: 'Mike Petsche'; 'Leger, Daryl'; 'Bill Beckett'
Subject: FW: NCR D3655-3
Attachments: Image1.jpg; D3655-RevA.pdf

Mike/Daryl,

I'm not very happy about this to say the least. We just went through the exercise of making a set of parts, trimming them to templates, conforming them to the drawings, and installing them in an aircraft. How can we have been off by 1"? This is totally unacceptable in my opinion. Someone along the line has dropped the ball. How could we have conformed the parts if they were 1" different than the drawings?

My guess is that all fingers will be pointed to Leanne because she is no longer there to defend herself, but if the drawings were no good, then why did you both sign them???? This is the kind of stuff you should be checking. I cannot do this myself from Calgary.

Now we're going to spend more time and money updating Solidworks models and doing drawing updates. We just certified this. These types of issues should have been sorted out on conformity. That was the whole point.

Chris,

If the parts match what is in the aircraft, they will be acceptable. But I don't think we should make any more without doing a PROPER FAI and checking against the drawing.

David

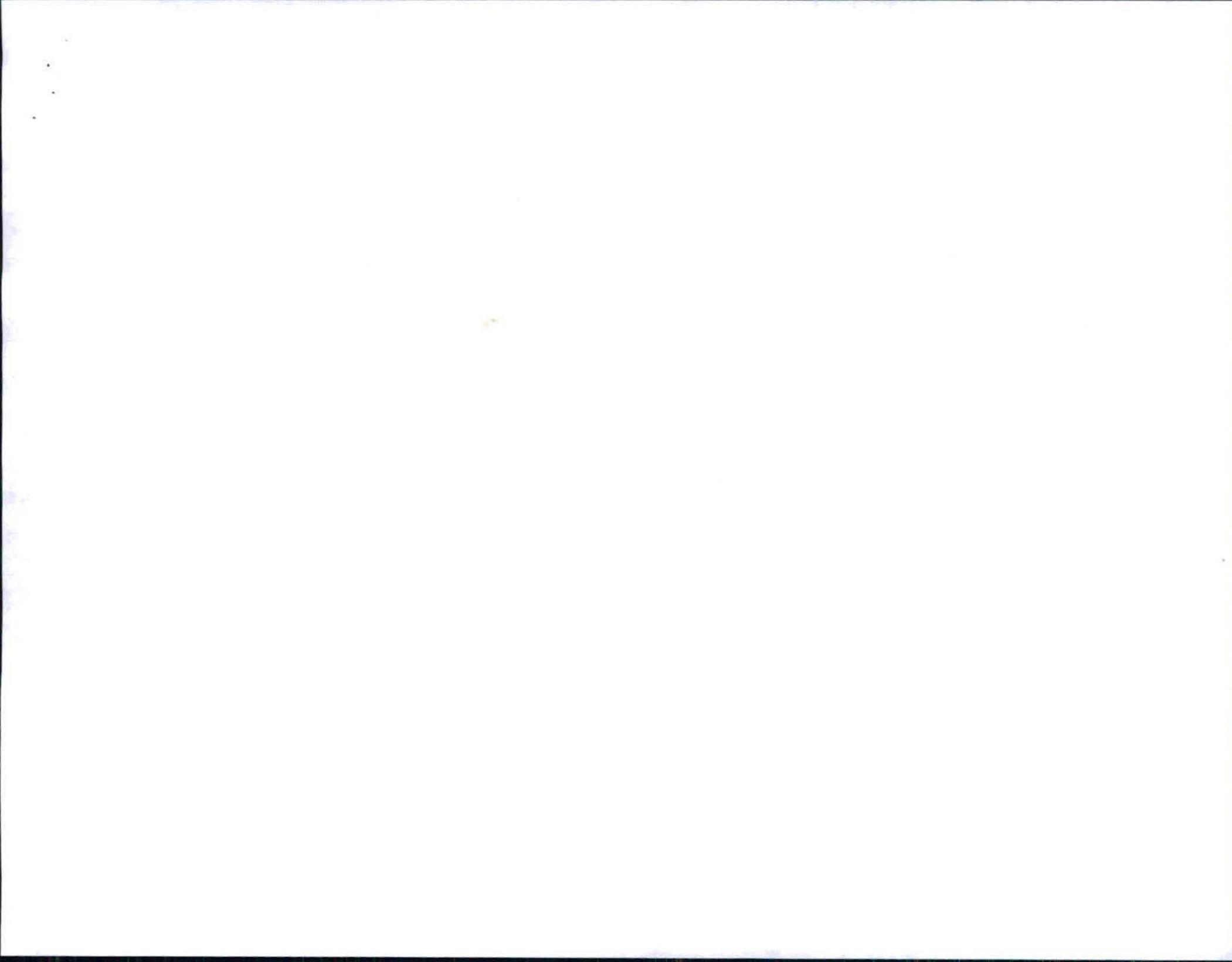
From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Friday, April 11, 2008 7:41 AM
To: dshepherd@dartaero.com
Cc: mpetsche@dartaero.com; D Leger
Subject: NCR D3655-3

David,

For the D3655-3 Panel (350 interiors), the dwg dimension 19.9" is 20.9", dwg dimension 45.5" is 44.5". Ref attached pic. The part was made to the mold. The dwg was evidently created before the mold, and the dimensions were never updated.

The 20.9" width of the 'slot' fits with the mating part correctly; 19.9" would be too small and would have a sloppy fit. A verified this myself.

The dwg length of 45.5" is impossible to achieve from the mold. Daryl made the part as long as possible. The



parts have evidently been fit into the aircraft and I'm told this dim works.

The dwg obviously needs an update. In the meantime, can we accept this deviation?

-Chris

No virus found in this incoming message.

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Version: 7.5.519 / Virus Database: 269.22.11/1371 - Release Date: 4/10/2008 12:23 PM

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.519 / Virus Database: 269.22.12/1373 - Release Date: 4/11/2008 9:17 AM

